ASTCPOEK

PoE/FPR Kit for Auto-Sync Time Clock

The Auto-Sync Time Clock is a validated time system with a Web interface and auto discovery.

The ASTCPOEK Kit provides Power over Ethernet with Full Power Reserve (FPR) for the Auto-Sync Time Clock.

Customer Support Information

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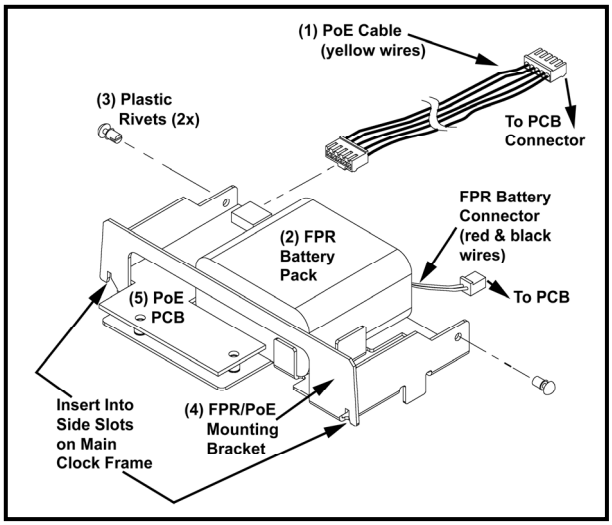
1. Auto-Sync Time Clock PoE/FPR Kit Installation Guide

This kit (ASTCPOEK) modifies the Auto-Sync Time Clock with the addition of Power over Ethernet (PoE) and the Full Power Reserve (FPR) battery. These optional additions to the Auto-Sync Time Clock provides normal operation without the use of AC power. The PoE provides power to the clock in conjunction with the FPR for normal operations, while also charging the FPR through the power provided over a standard Ethernet connection.

The kit contains the following components:

No.	Description	QTY
1	PoE Cable	1
2	FPR Battery Pack Assembly with Connector	1
3	Plastic Rivet	2
4	Metal Mounting Bracket	1
5	PoE PCB	1
	Plastic Cable Tie (not shown)	1
	Auto-Sync PoE/FPR Kit Installation Guide	1

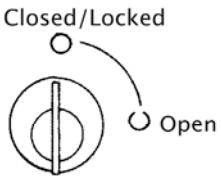


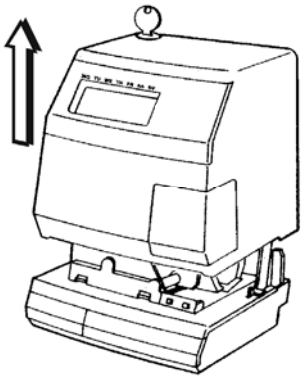
1.1. How to Install the PoE/FPR Kit

1. Disconnect the clock AC adapter from the power outlet.

NOTE: Failure to do so could result in a hazardous shock.

2. Insert and turn the key clockwise to remove the upper cover.
3. Remove the upper cover of the Auto-Sync Time Clock (see figure to the right).
4. Remove one small Phillips head retaining screw from right and left front sides of the top plate (see *Figure 1*).
5. Disconnect the Ethernet cable at the RJ-45 network connector (see *Figure 1).*





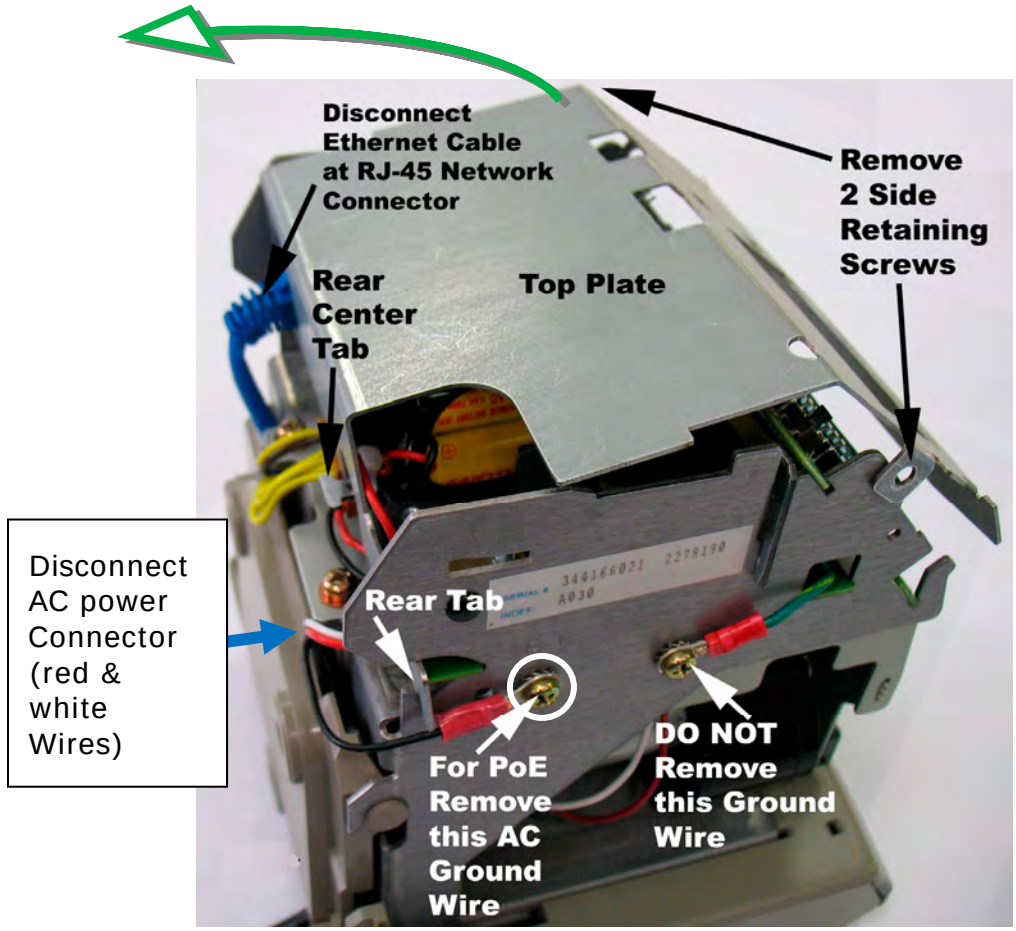
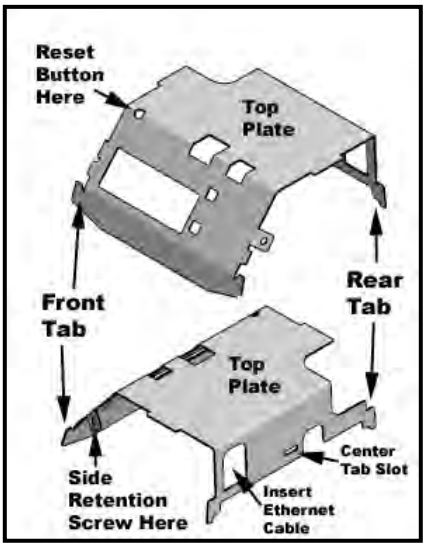


Figure 1. Top Plate Removal.

6. Lift up the top plate by pulling upwards and towards the back of the clock to remove it. Temporarily set aside. Note the alignment of the top plate during removal – especially the front and rear tabs (see figure to the right).
7. Carefully lift the front PCB up and out of its retaining slot. This is the PCB with the coin battery on it. Just lift the PCB up enough to provide adequate clearance for the FPR mounting bracket to be inserted into its side retaining slots on the right and left sides of the main clock frame (see *Figure 2*).
8. Carefully insert the PoE/FPR mounting bracket with the FPR battery pack and PoE PCB. The mounting bracket will fit only one way as it has a cutout that must slip over the rectangular shaped network connector (see *Figure 4*).



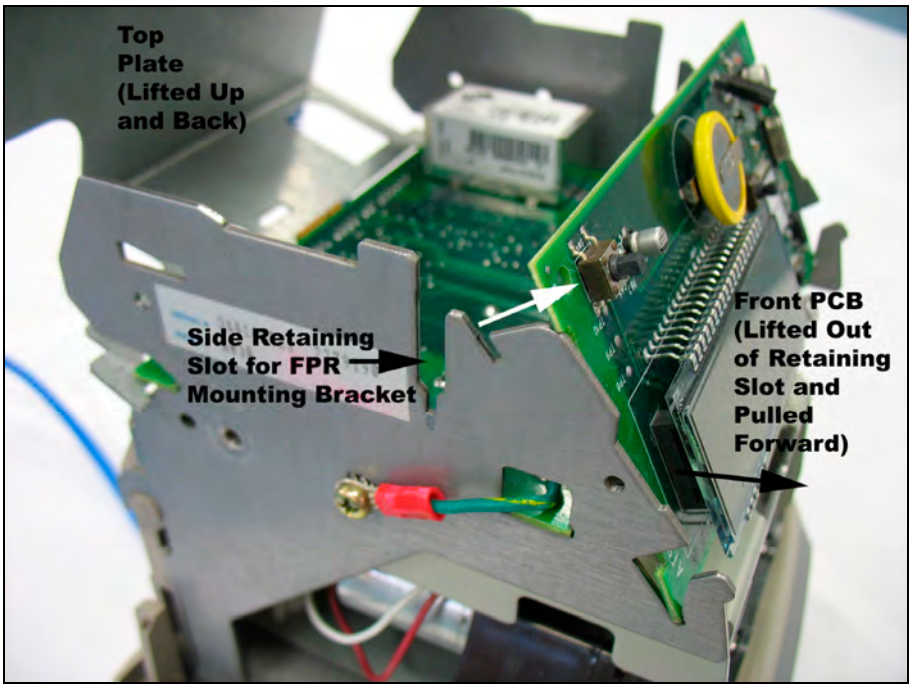


Figure 2. Temporarily Relocate Front PCB.

9. After the FPR mounting bracket is in its proper position, return the front PCB to its original position seated in its retaining slot. In this position the top rear of the PCB will fit close alongside the FPR mounting bracket.

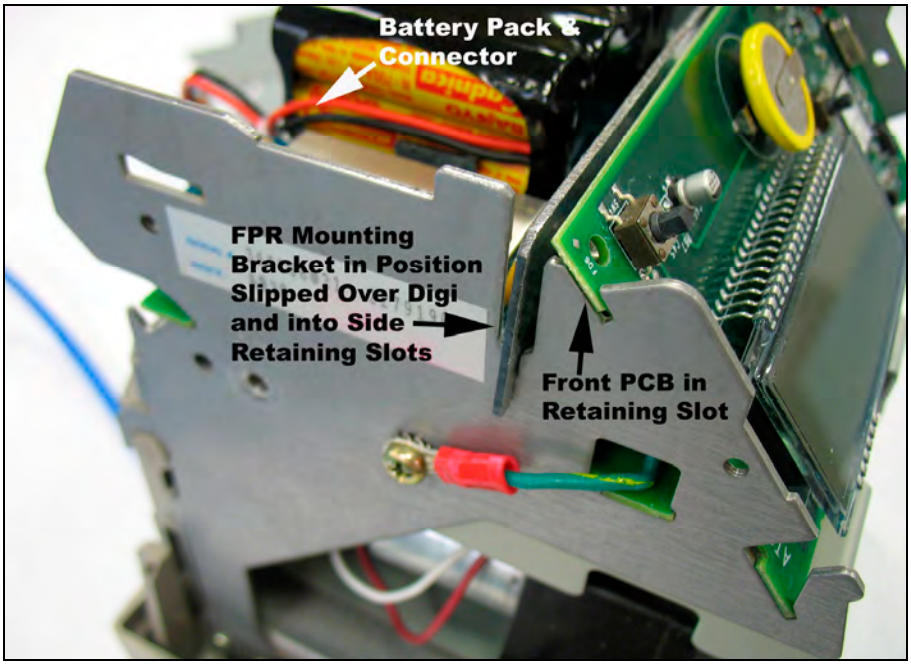


Figure 3. Front PCB & FPR Mounting Bracket in Position.

10. Install the two plastic rivets (1 per each side) as illustrated in *Figure 4* through the side of the clock frame into the proper locating hole in the FPR mounting bracket.

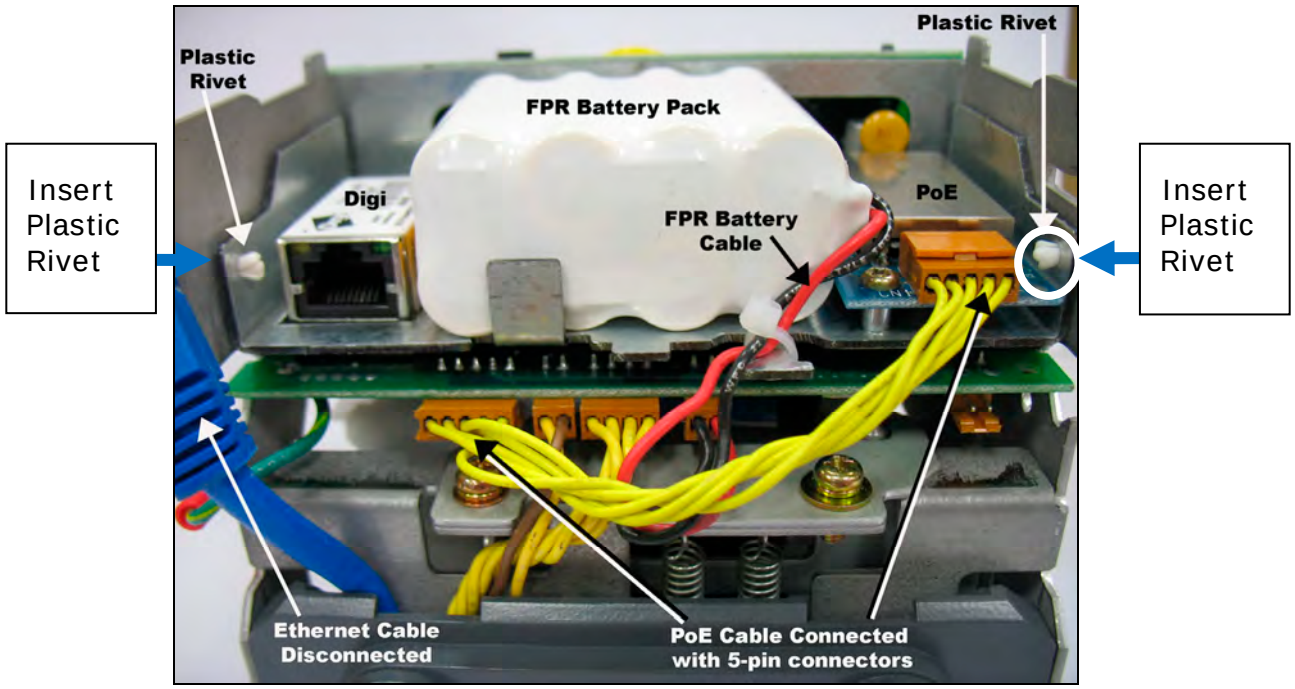


Figure 4. Auto-Sync Time Clock Rear View.

11. Remove the rear wall mounting plate (see Wall Mounting in the Operation Guide). Disconnect the AC power connector from the PCB (red & white wires – see *Figure 4*).

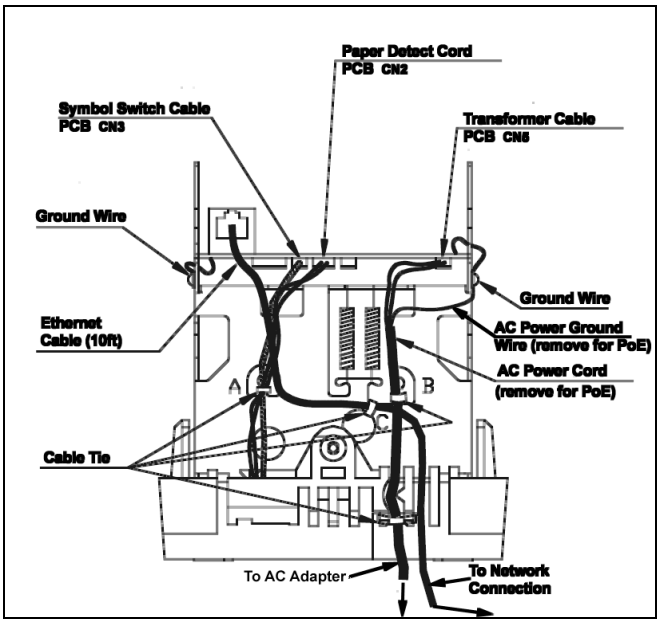
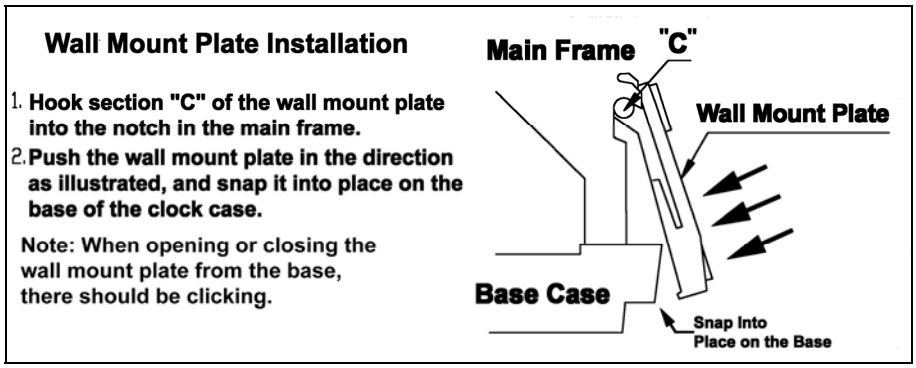


Figure 5. Rear View Showing AC Power Line For Removal.

12. Unscrew the Phillips head screw and remove the black ground wire for the AC line (see *Figure 5*). Remove the AC power line from the back of the clock with the transformer at the end. You may have to cut a couple of plastic wire ties to do this.

13. Reinstall the wall mounting plate (see figures below) on the back of the clock using caution to verify that the Ethernet cable is properly routed.



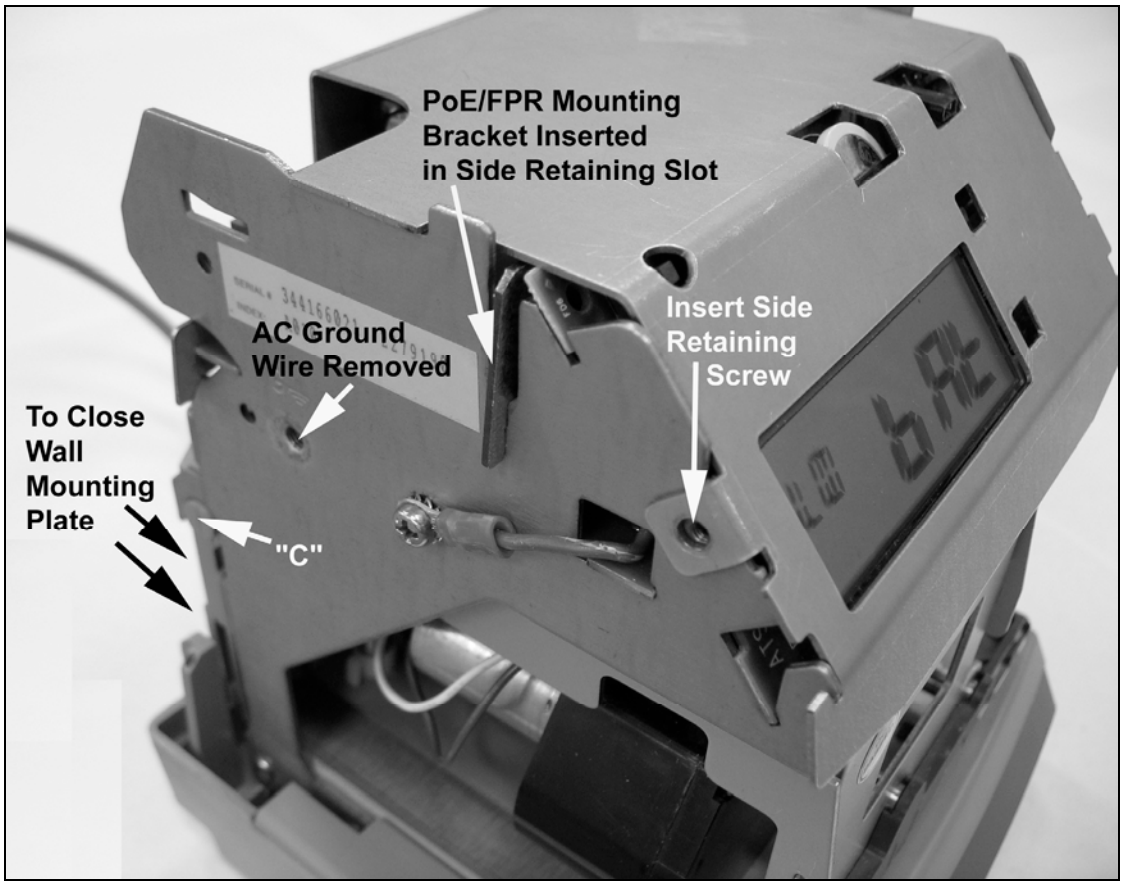


Figure 6. Side Clock View with PoE/FPR.

14. Plug in the FPR battery pack cable (the connector with the black and red wires) into the small open connector (see *Figure 7*) located just under the battery pack on the PCB. Next, plug in the PoE connector to the left of the FPR connector for the PoE cable (yellow wires). It is keyed and can only fit into the connector one way. The connection for the PoE cable has a 6-pin connector on the main PCB and a 5-pin connector at the PoE PCB. Both connector ends are keyed (can only fit in one way). You may have to temporarily remove the connector on the PoE PCB to install the top plate.

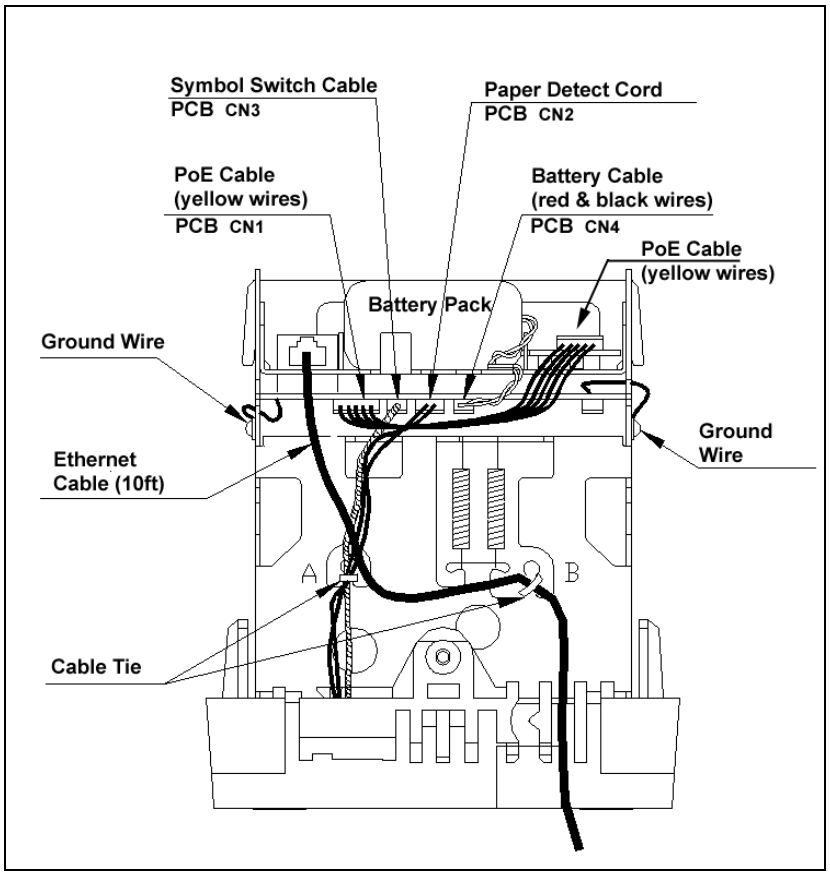
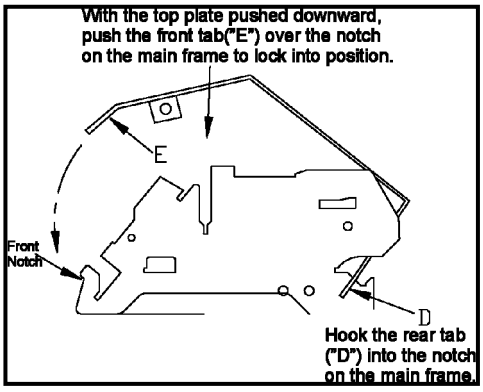


Figure 7. Rear View Showing PoE & FPR Cables/Connections.

15. Carefully reinstall the top plate by first inserting the rear tabs into the appropriate rear notches, making sure the rear centering tab is located in its notch. Then push the plate forward (see right-hand figure) making sure to align the sides and front of the plate in the proper position. Finally push the plate downward to lock into position.



16. Insert and tighten the two (2) top plate side retaining screws (one on each side).

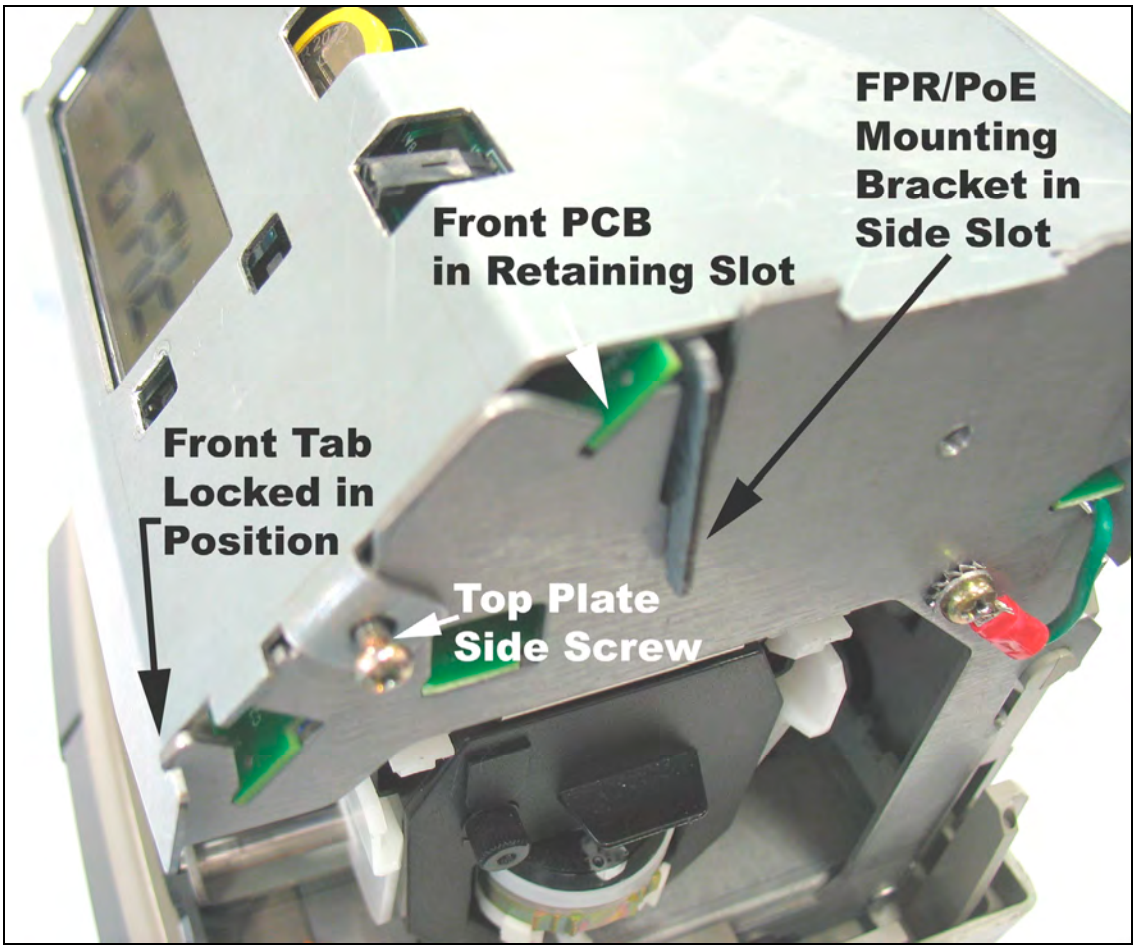


Figure 8. Top Plate Installed.

17. Insert the Ethernet connector through the hole in the rear of the top plate into the RJ-45 network connector (previously disconnected in Step 4).

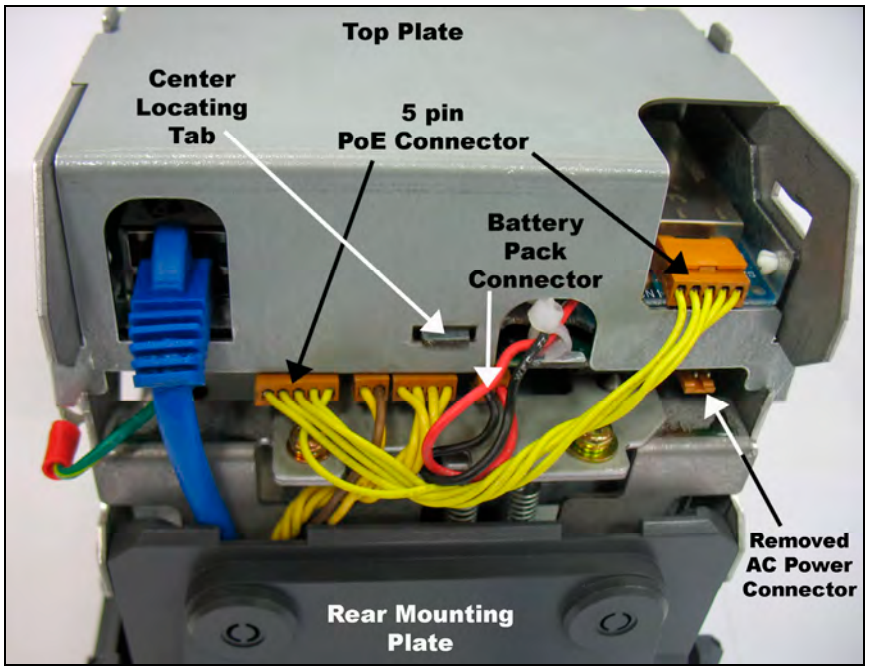


Figure 9. PoE & FPR Connectors.

18. Replace the upper cover of the Auto-Sync Time Clock.
19. Connect the clock Ethernet cable to a network connection (AC power no longer required when equipped with the PoE option).

NOTE: After installing the PoE with FPR and connecting the unit to a network connection for the first time, the PoE may require up to 24 hours to fully charge the battery pack. However, the unit can be immediately used. You must keep the clock plugged into the network during normal operation to maintain a continuous charge. The power reserve battery is designed to provide additional power for printing during normal operation.

NOTE: For units with the PoE/FPR option, disconnect the FPR battery pack cable connector if the Auto-Sync Time Clock will not be plugged into a PoE terminal for an extended amount of time. Leaving the battery pack connect without charging for a long time could promote battery harm and damage to the clock.

NOTE: For units with the PoE/FPR option, ***leaving the Auto-Sync Time Clock unplugged from a PoE terminal or without power for more than 24 hours may create a problem with the clock starting up*** *(you will see "low bat" briefly appear in the display). In this instance, the clock should be started with the battery pack cable disconnected and the clock plugged into a PoE terminal. Wait until the clock starts up, or displays the time, then the battery pack cable can be reconnected and it will charge. During this time, Amano recommends to wait for 24 hours before printing.*

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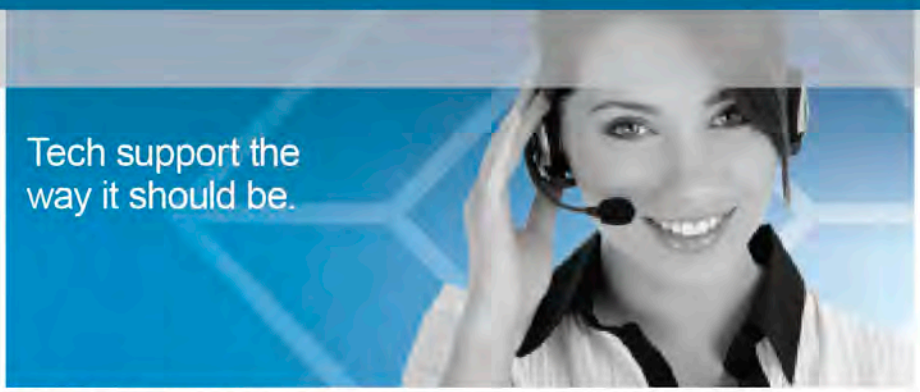

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